

5. *Analysis of Healthy Blood.* By M. L. R. LECANU.—We noticed in our preceding No. the interesting researches of M. Lecanu into the chemical composition of the blood. The following table, from the *Journal de Pharmacie*, for Sept. 1831, exhibits the different constituents, and their proportions.

Water	-	-	-	-	-	780.145	-	-	785.590
Fibrine	-	-	-	-	-	2.100	-	-	3.565
Albumen	-	-	-	-	-	65.090	-	-	69.415
Fatty matter;									
a. crystalline	-	-	-	-	-	2.430	-	-	4.300
b. oily	-	-	-	-	-	1.310	-	-	2.270
Colouring matter	-	-	-	-	-	133.000	-	-	119.626
Extractive soluble in alcohol and water	-	-	-	-	-	1.790	-	-	1.920
Albuminate of soda	-	-	-	-	-	1.265	-	-	2.010
Muriate of soda	} Alkaline	}	-	-	-	8.370	-	-	7.304
Muriate of potassa									
Carbonate									
Phosphate									
Sulphate									
Carbonate of lime	} Acid	}	-	-	-	2.100	-	-	1.414
Carbonate of magnesia									
Phosphate of lime									
Phosphate of magnesia									
Phosphate of iron									
Loss	-	-	-	-	-	2.400	-	-	2.586
Total	-	-	-	-	-	1000.000	-	-	1000.000

PATHOLOGY.

6. HACKMANN on *Softening of the Spleen*.—Softening of the spleen is sometimes sporadic, but more frequently it is either epidemic or endemic: in the latter cases it is intimately connected with other diseases which are in themselves epidemic or endemic likewise. *Spleno-malacie* is frequent, not only in the human subject, but is common also among animals, especially among the ruminantia. When sporadic, this affection follows sporadic intermittents; when epidemic, it accompanies epidemic fevers in hot and marshy countries. In the last epidemic which ravaged the north of Germany, softening and hypertrophy of the spleen were phenomena so constant, that Dr. Douss even ventured to call the disease *splenitis epidemica contagiosa*. Fevers in Sardinia likewise often terminate in softening of the spleen: this lesion, however, is always the effect of a more general disease; at least, the author has never met with an idiopathic case. According to the opinion of Hackmann, softening of the spleen depends upon over-congestion, or venous inflammation, of which there are two stages, one of irritation or congestion, and one of true ramollissement. The symptoms of the first are, fever with gastric disorder predominating, but of which the type will vary according to the season, the climate, or the constitution of the patient. In hot and marshy countries, or even in more temperate parallels during the summer, the access of fever is preceded by an ordinary shivering, but the intervals are so slight that it might perhaps be considered a remittent. The rigors, which vary in duration and intensity, are followed by a burning heat, after which a profuse perspiration prevails. At the beginning of the attack, the patient vomits a clear fluid, often mixed with bile; which ejections con-

tinuing during the cold, cease on the access of the hot stage, and recur with the recurrence of each fit. In northern climates, these symptoms diminish as the disease advances; while, in tropical countries, they continue unabated, as the black vomit of the yellow fever will witness. Hæmatemesis only occurs in chronic cases of spleno-malacie. Another essential symptom of this disease is præcordial distress marked by similar exacerbations and remissions with the fever, and which probably depend upon the compression of the diaphragm by the enlarged spleen. This symptom is never entirely absent in any case, and sometimes it is developed in so great intensity as to become truly *orthopnea*.

Of other diagnostic signs of this disease the principal are, great lassitude, pains in the limbs, vertigo, flushed face and eyes, and great thirst, (which, if satisfied, increases the præcordial pain;) the tongue at first is of a pale red, and covered by a yellowish fur, by degrees it becomes of a bright red, and cracks; but it remains generally moist, and is often studded with aphthous eruptions. The abdomen is swelled, soft in the umbilical region, but not tender, pain being only felt when the body is bent and pressure made towards the stomach or spleen. In the epigastrium, a very sensible pulsation may be perceived; and as the disease advances, this pulsation extends also to the region of the spleen. Most frequently the fever is ushered in by diarrhœa, (ten or twelve evacuations in twenty-four hours;) the matter passed being dark-coloured, greenish, watery, and very fetid. It is during the feeble exacerbations that the stools are most frequent; and this circumstance, joined to the vomitings, gives to the disease an appearance of cholera. The patients are excited, they sleep but little, wander much, and become delirious; the pulse is variable, at first full and soft, afterwards becoming small and very frequent; sometimes, however, it does not vary much, but remains slow, and occasionally intermitting.

The stage of ramollissement seems to be shown by a great collapse, and the access of typhoid symptoms, and death ensues as in cases of fever, or follows a state of coma resembling apoplexy. This apoplectic state is a phenomenon that frequently occurs in ramollissement of the spleen.

The progress of *spleno-malacie* is, in general, rapid, like that of the fevers of which it is the result; thus, ramollissement may take place in the course of eleven or twelve days. Still the disease may assume a chronic form, as two cases recorded by Bonet and Portal, and one observed by the author, have sufficiently shown.

There are different degrees of ramollissement: in the first, the spleen is gorged with blood of a black or dirty brown colour, amongst which the reticular tissues cannot be distinguished; the structure is more friable than when in a healthy state, and pressure will discharge a great quantity of dark-coloured blood, so that there will remain nothing but a sac containing black blood, and a soft matter resembling chocolate.

In the more severe forms of ramollissement, the spleen bursts spontaneously, without any previous violence, during the life of the patient, and the matter escapes into the abdominal cavity, when death speedily ensues. The volume of the viscus thus softened is not always much increased, but most frequently the bulk is considerably augmented if the individual has suffered from endemic intermittent or remittent fever.

Of the mode in which ramollissement of the spleen is effected nothing more is known than of ramollissement in general; however, most pathologists agree that such morbid alterations result from sanguineous congestion and inflammation, disorganizing the viscus, and ending in gangrene.

Towards the conclusion of his memoir, the author relates eight cases of acute spleno-malacie, extracted from the writings of Heusinger, Grotanelli, Montfalcon, and Bailly, and one chronic case which fell under his own observation.—*Lond. Med. and Phys. Journ. from Hacker's Litterarische Annalen.*

7. *Abscess in the Parietes of the Left Ventricle of the Heart.*—An instance of this has been met with by M. C. BROUSSAIS, in a young soldier who died in the